

IN THE CLAIMS:

The following is a complete listing of the claims. Please amend the claims as follows:

1-10. (Canceled).

11. (Currently Amended) A damper for an aircraft, the damper providing for selection between at least two spring rates, the damper comprising:

 a piston having an axis, an outer surface, a first end and a second opposing end;
 a housing;

 a first elastomeric seal in sealing contact with the outer surface of the piston at the first end, the first seal being coaxial with the piston and limiting movement of the piston to a path along the axis of the piston, the first seal also defining a first fluid chamber adjacent the first end of the piston, the first seal also being fixed to the housing, the first elastomeric seal having:

 a layer of elastomeric material; and
 a layer of rigid, non-elastomeric material;

 a second elastomeric seal spaced apart from the first elastomeric seal, the second elastomeric seal being in sealing contact with the outer surface of the piston at the second end, the second seal being coaxial with the piston and limiting the movement of the piston to a path along the axis of the piston, the second seal also defining a second fluid chamber adjacent to the second end of the piston, the second seal also being fixed to the housing, the second elastomeric seal having:

 a layer of elastomeric material; and
 a layer of rigid, non-elastomeric material;

 a primary passage extending through the piston from the first fluid chamber to the second fluid chamber, the primary passage providing fluid passage between the fluid chambers;

a secondary passage extending through the piston from the first fluid chamber to the second fluid chamber, the secondary passage providing fluid passage between the fluid chambers;

a bypass passage extending through the piston from one end to the opposing end of the piston for limiting the pressure imbalance between the fluid chambers;

a selectively switchable rotary valve disposed within the piston and in fluid communication with the fluid passing through the primary passage, the selectively switchable valve being adapted for controlling a flow of fluid from one of the chambers to another of the chambers through the primary passage, such that when the selectively switchable valve is open, the flow of fluid through the primary passage is not resisted by the selectively switchable valve in either direction; further, when the selectively switchable valve is closed, the flow of fluid through the primary passage is restricted in both directions by the selectively switchable valve; wherein

when the flow of fluid through the primary passage is permitted, movement of the piston is resisted by a first spring rate; and

when the flow of fluid through the primary passage is restricted, movement of the piston is resisted by a second spring rate; and

a switch operably associated with the rotary valve, the switch being adapted to open and close the primary passage via the rotary valve; and

a control system operably associated with the switch, the control system being configured to automatically open and close the selectively switchable rotary valve upon detection of a ground surface over which the aircraft is flying.

12-18. (Canceled).

19. (Currently Amended) The damper according to claim [[17]] 11, further comprising:

a bypass valve located within the bypass passage.

20. (Currently Amended) A method for providing multiple spring rates within an aircraft damper, the method comprising the steps of:

sealingly engaging opposite ends of a piston with elastomeric seals to form fluid chambers;

communicating the fluid chambers with a passage extending through the piston from one end to the opposing end of the piston, the passage providing fluid passage between the fluid chambers;

communicating the fluid chambers with a bypass passage extending through the piston from one end to the opposing end of the piston for limiting the pressure imbalance between the fluid chambers;

selectively controlling an amount of fluid flow through the passage with a selectively switchable rotary valve disposed within the piston and in fluid communication with the fluid passing through the passage, the selectively switchable valve being adapted for controlling a flow of fluid from one of the chambers to another of the chambers through the passage, such that when the selectively switchable valve is open, the flow of fluid through the passage is not resisted by the selectively switchable valve in either direction; further, when the selectively switchable valve is closed, the flow of fluid through the passage is restricted in both directions by the selectively switchable valve;

detecting the proximity of the ground relative to the aircraft with a sensor; and

automatically controlling the amount of fluid through the passage with a control system operably associated with the selectively switchable valve;

wherein upon detection of a selected proximity of the ground relative to the aircraft, the control system switches the rotary valve, thus preventing fluid from passing through the passage, resulting in the a stiffer spring rate; and

wherein the movement of the piston is resisted by a total spring rate, which is the sum of a first spring rate due to a shear force required to cause shear deflection of the seals and a second spring rate due to a force required to cause bulging deflection of the seals by fluid pressure induced by the movement of the piston.

The Applicant submits that the foregoing amendments add no new matter to the application.